## AMENDMENTS

**Listing of Claims**

1-29. (Canceled)

30. (Presently amended) A method ~~for~~of screening for protein stability, folding and/or solubility mutants comprising:

a) providing a gene encoding a fusion protein comprising (i) a protein of interest and (ii) a first segment of a marker protein, wherein said first segment does not affect the folding or solubility of the protein of interest,~~,~~ wherein said fusion protein is unstable, not properly folded and/or not soluble when expressed in said host cell;

b) mutagenizing that portion of the gene encoding said protein of interest;

c) expressing said fusion protein in a host cell that expresses a second segment of said marker protein, wherein said second segment is capable of structural complementation with said first segment; and

d) determining structural complementation,

wherein a relative increase in structural complementation, as compared to the structural complementation observed with the unmutagenized fusion protein, indicates an increase in stability, proper folding and/or solubility of said protein.

31. (Original) The method of claim 30, wherein said fusion is C-terminal to said protein of interest.

32 (Original) The method of claim 30, wherein said fusion is N-terminal to said protein of interest.

33. (Original) The method of claim 30, wherein said marker protein is selected from the group consisting of a target binding protein, an enzyme, a protein inhibitor, a chromophore.

34. (Original) The method of claim 30, wherein said host cell is selected from the group consisting of a bacterial cell, an insect cell, a yeast cell, a nematode cell, a mammalian cell.

35-40. (Canceled)

41. (New) The method of claim 30, wherein the unmutagenized fusion protein is unstable.

42. (New) The method of claim 30, wherein the unmutagenized fusion protein is not properly folded.

43. (New) The method of claim 30, wherein the unmutagenized fusion protein is not soluble.